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FRAMING DRAWING BTU  
ITC MIDWEST LLC

Segment 1 of 4



Page 1

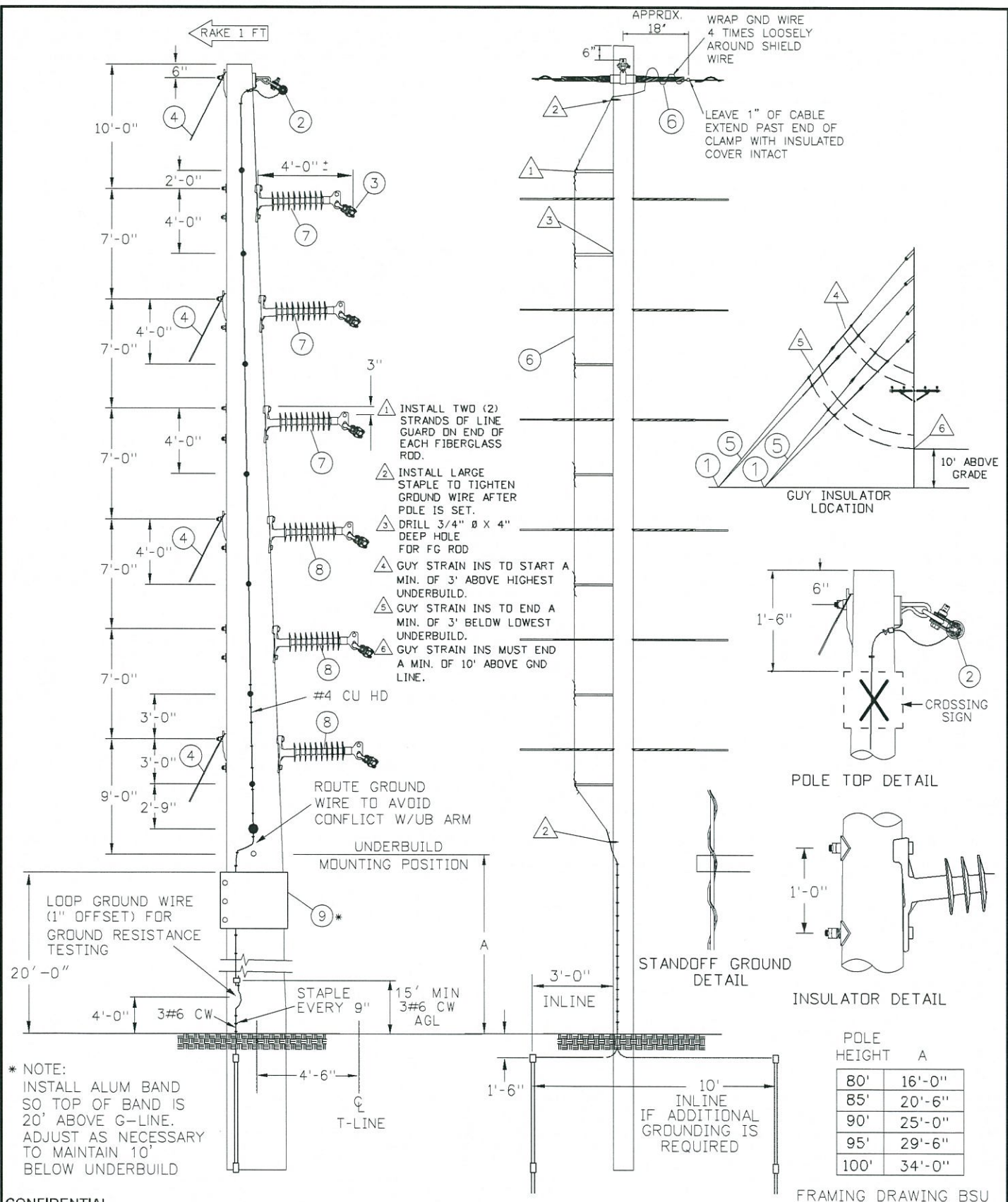
69KV DBL CKT TANGENT  
W/HPI & STANDOFF GND  
3/8" EHS SHIELD WIRE

Scale: NONE

DWG. NO.

JJ0TGVMW

0	12-30-2015	ORIGINAL ISSUE	WBN-KJB UET-DWH
NO.	DATE	REVISION	BY CHK'DAPV'D



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FRAMING DRAWING BSU

ITC MIDWEST LLC

Segment 1 of 4



Page 2

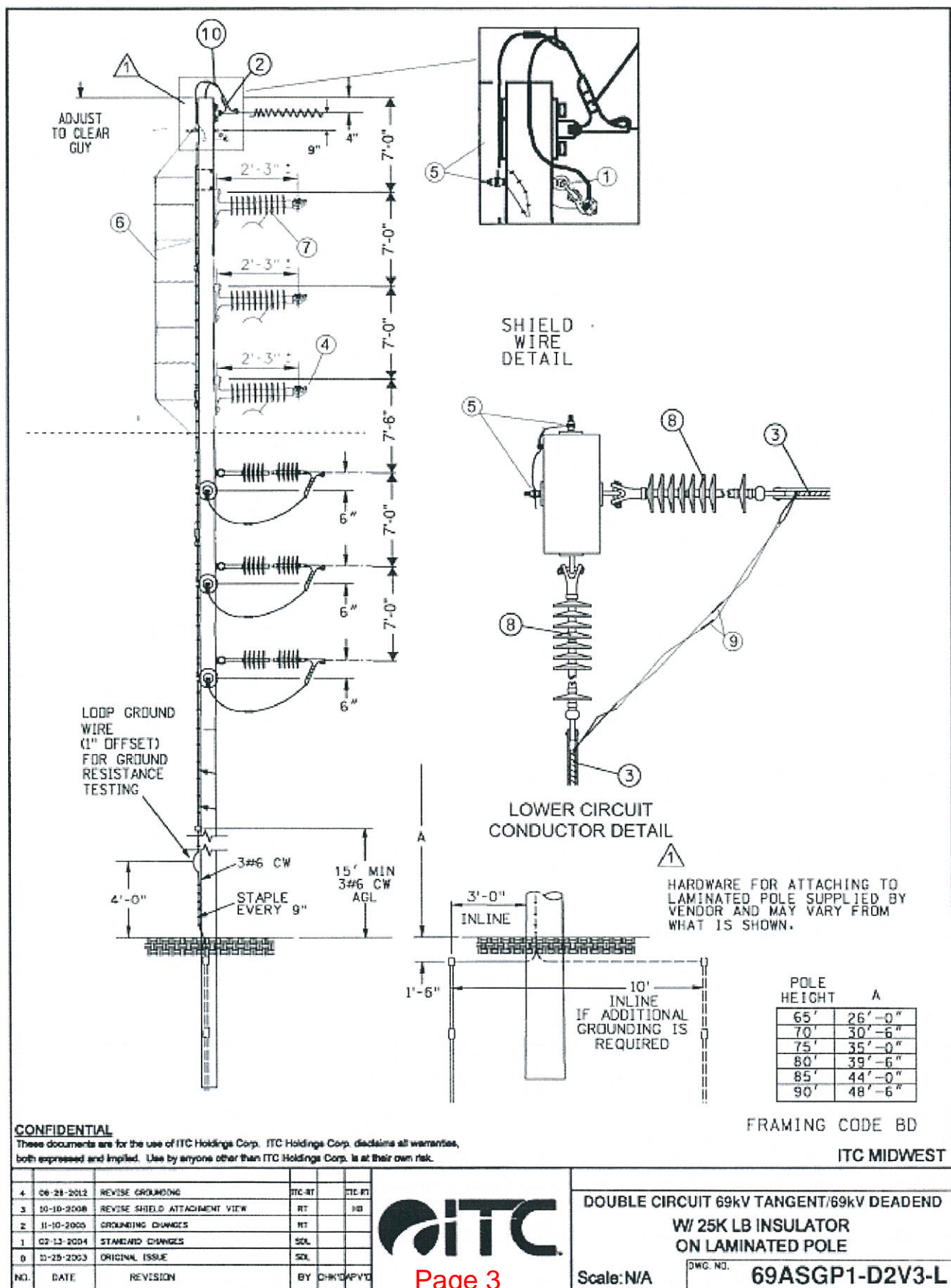
69KV DBL CKT MEDIUM ANGLE 10-20 DEG.  
W/2.5" HPI & STANDOFF GROUND  
WITH 3/8" EHS

SCALE:NONE

DWG. NO.

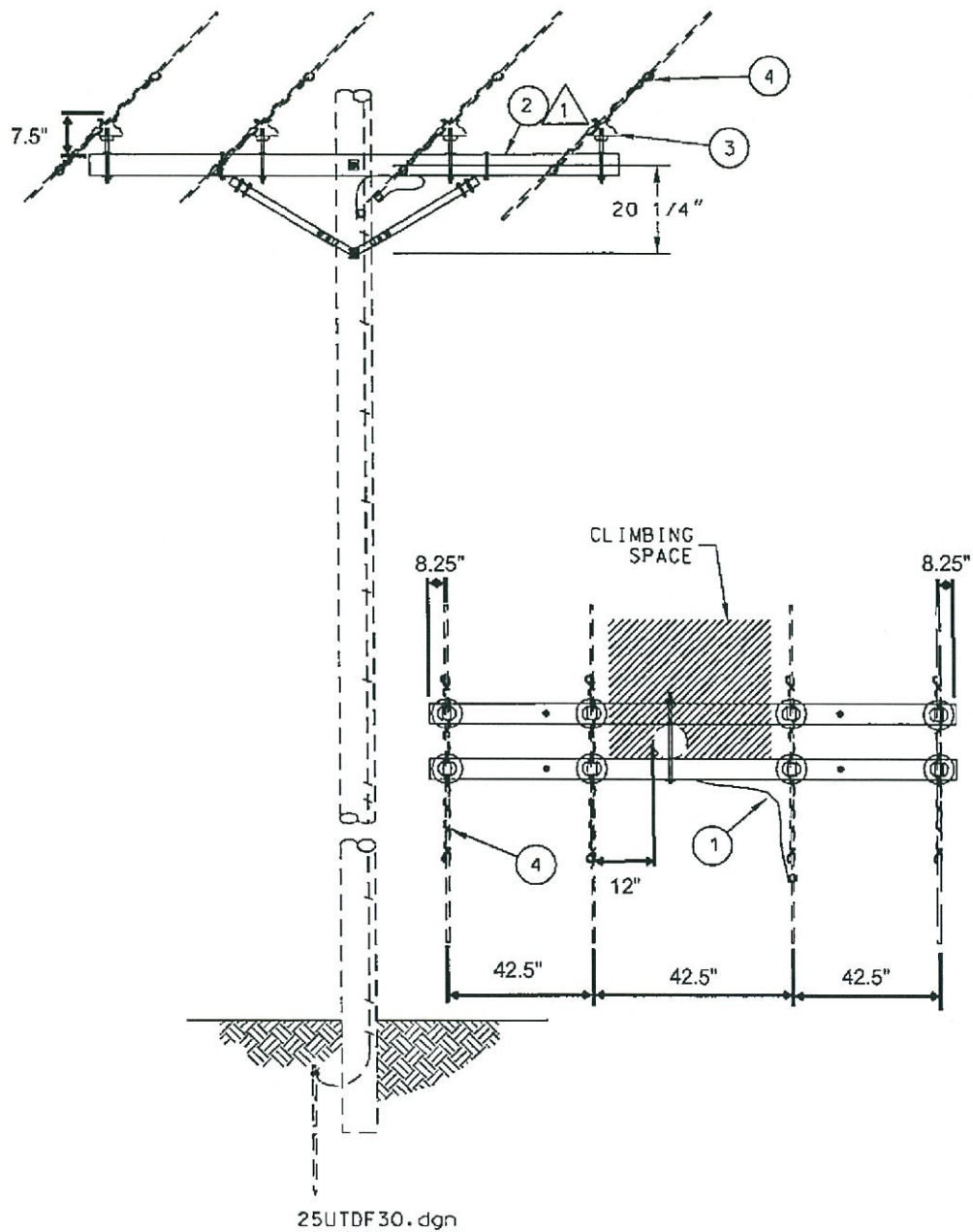
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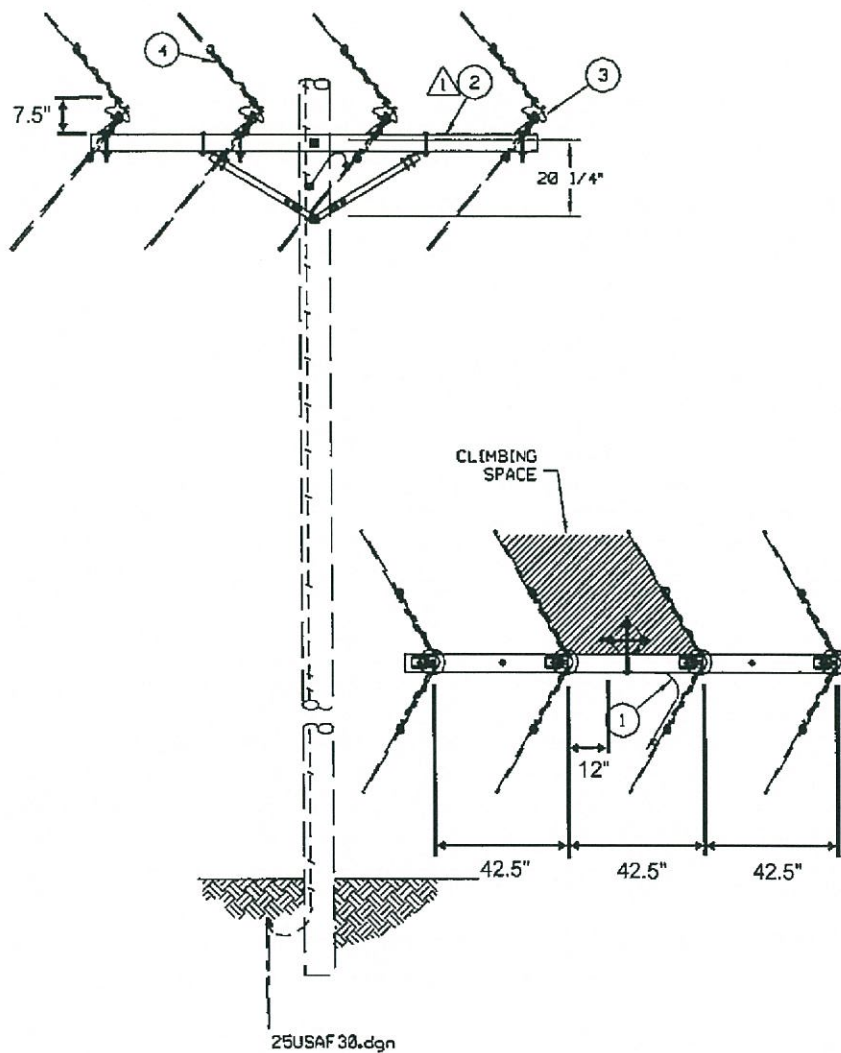


Segment 1 of 4

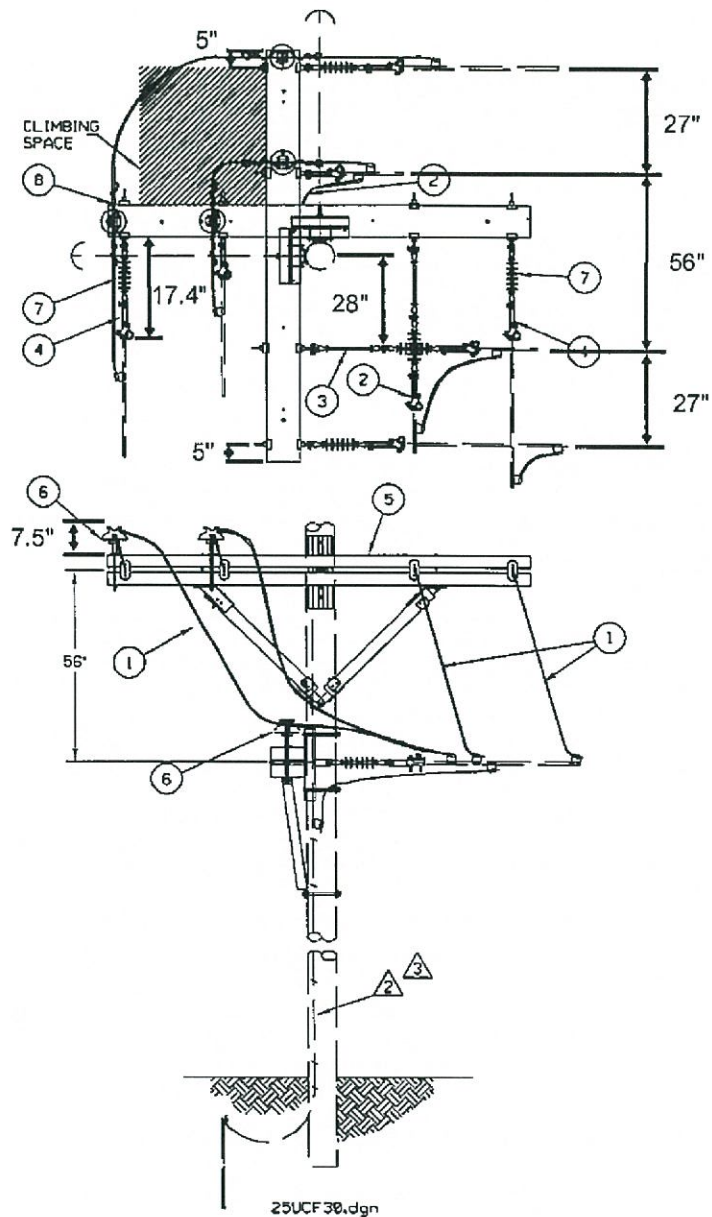
Page 3



DESIGN GUIDELINES					
Conductor Size	1/0	266	T2-1/0	477 18/1	T2-4/0
Maximum Span	350	350	325	325	325
Maximum Angle	1°	1°	1°	1/2°	1/2°
GUY ALL STRUCTURES GREATER THAN 1°					



DESIGN GUIDELINES					
Conductor Size	1/0	266	T2-1/0	477 18/1	T2-4/0
Maximum Span	350	350	325	325	325
Maximum Angle	15°	10°	10°	8°	8°



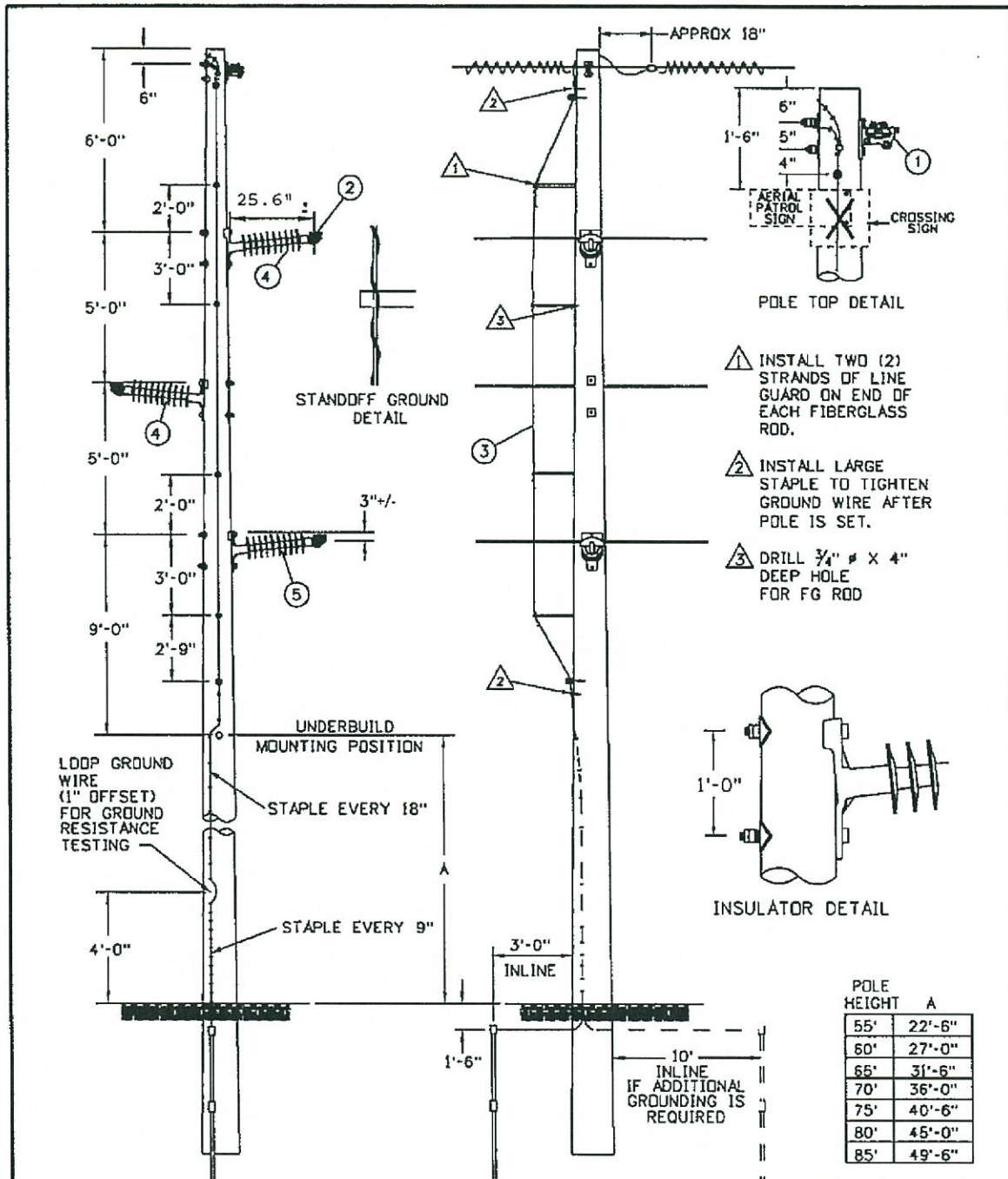
DESIGN GUIDELINES					
Conductor Size	1/0	266	T21/0	477 18/1	T24/0
Maximum Span	350	350	325	325	325
Maximum Angle	90°	90°	90°	90°	90°



Transmission  
Construction  
Standards

69kV Assemblies  
69kV Tangent  
w/ HPI & Standoff Ground

Std No: TCS-11  
Page 1  
Issued Oct. 2008



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ITC Midwest

NO.	DATE	REVISION	BY	CHKD	APPV
3	10-17-08	CHANGE TO ITC BORDER	RAH		
2	11-10-05	GROUNDING CHANGES	RI		
1	02-13-04	STANDARD CHANGES	SL		00
0	06-01-99	ORIGINAL ISSUE	SLK		



Page 7

69KV TANGENT W/ HPI & STANDOFF GND

Scale: NONE

DWG. NO.

69TGSP

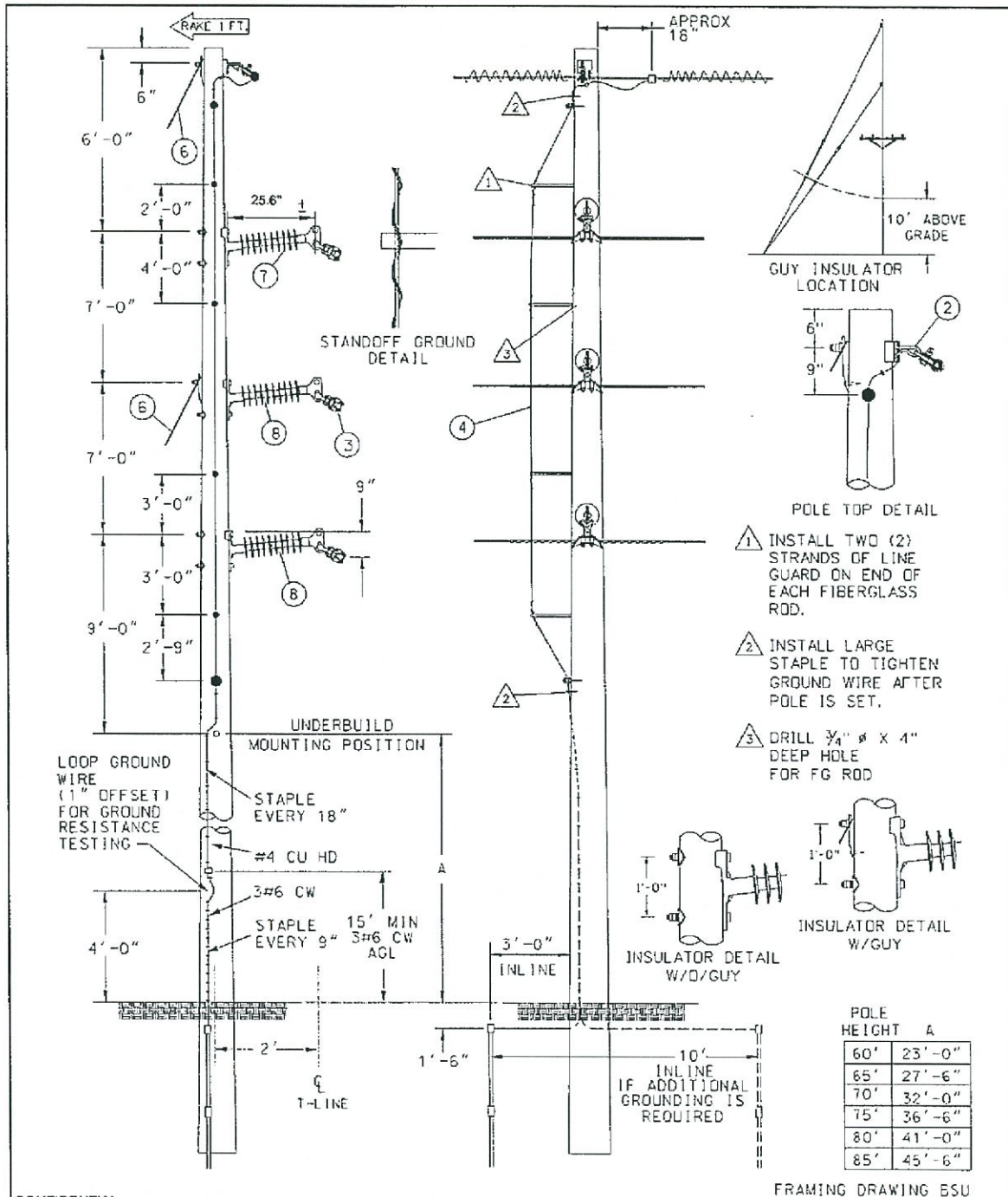
Segment 2 of 4



Transmission  
Construction  
Standards

69kV Assemblies  
69kV Medium Angle 10-20 Deg.  
w/ 2 Hole HPI & Standoff Ground

Std No: TCS-11  
Page 26  
Issued Nov. 2012

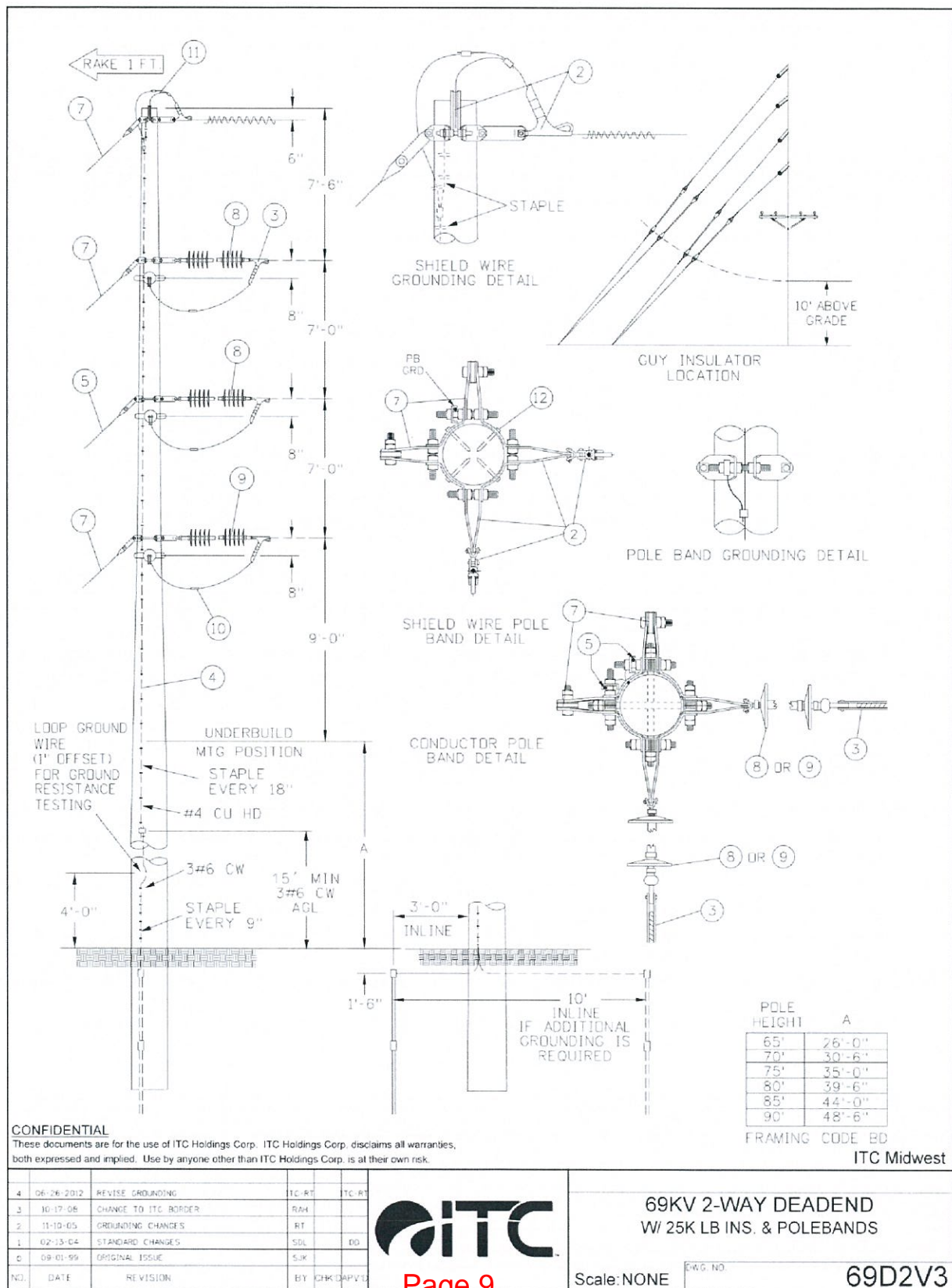




Transmission  
Construction  
Standards

69kV Assemblies  
69kV 2-Way Deadend  
w/ 25lb.ins. & Polebands

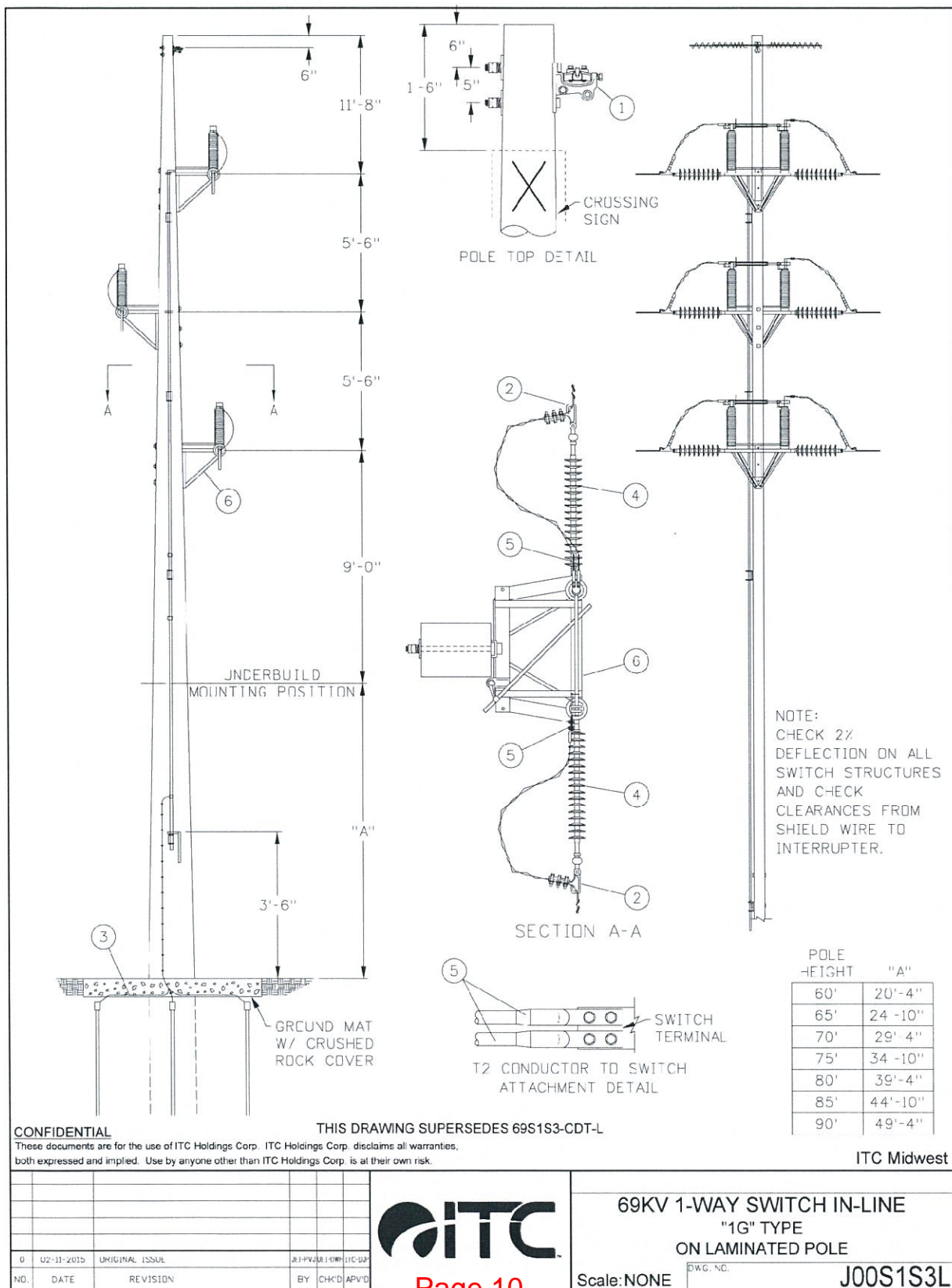
Std No: TCS-11  
Page 41  
Issued Nov. 2012



Transmission  
Construction  
Standards

69kV Assemblies  
69kV 1-Way Switch  
In-Line "1G" Type on Lam Pole

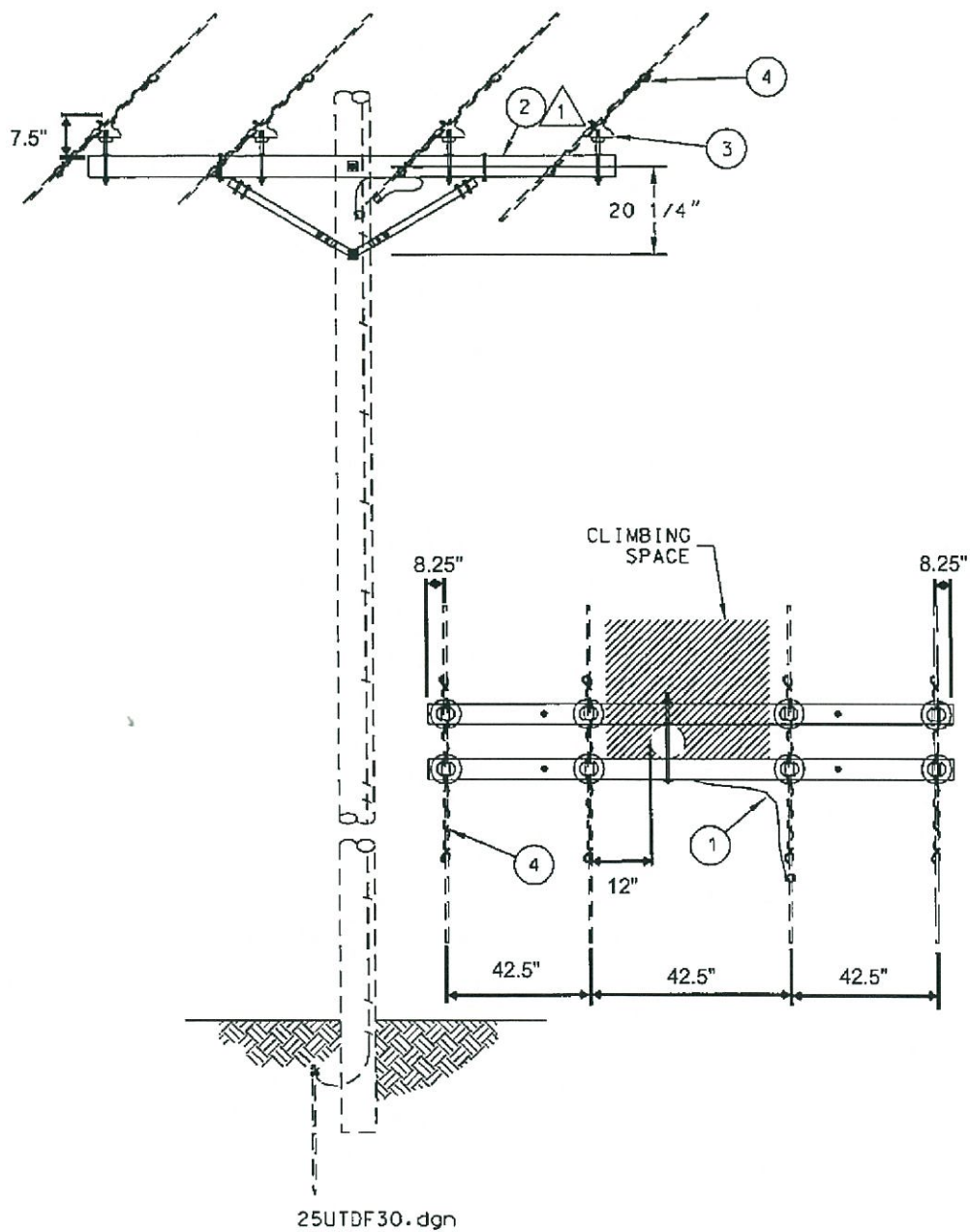
Std No: TCS-12  
Page 14  
Issued MAY 2015



Page 10

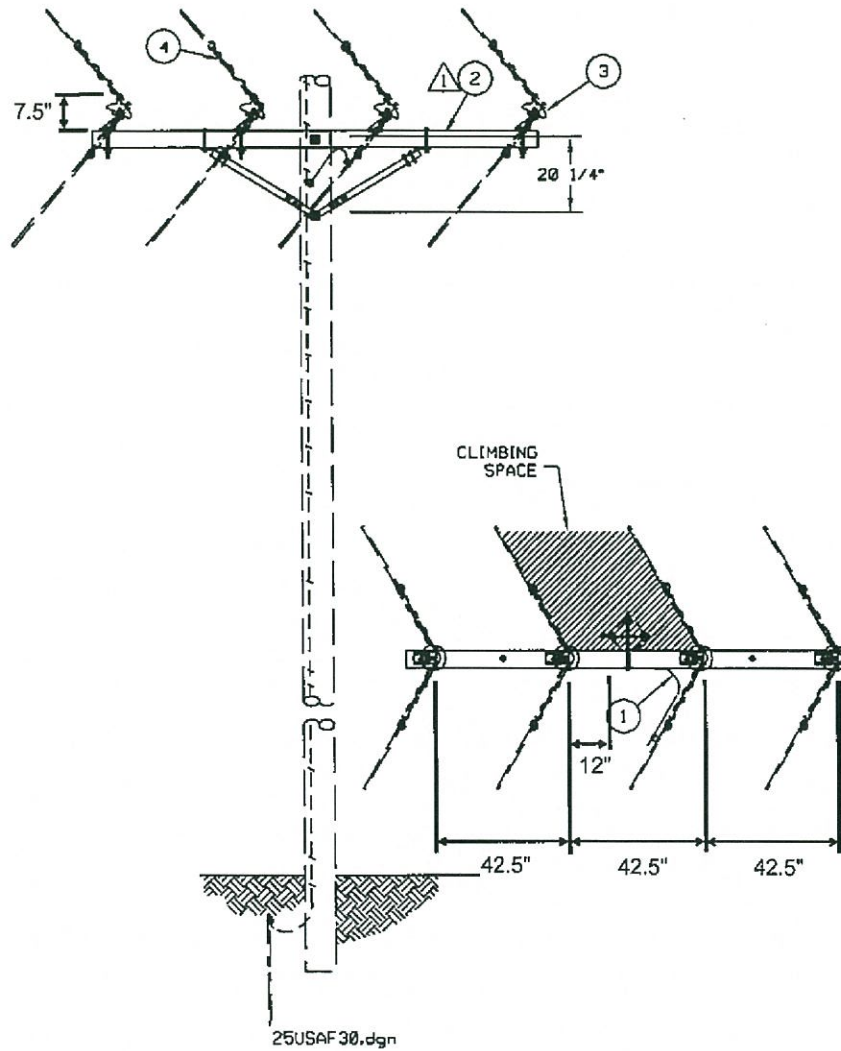
Segment 2 of 4



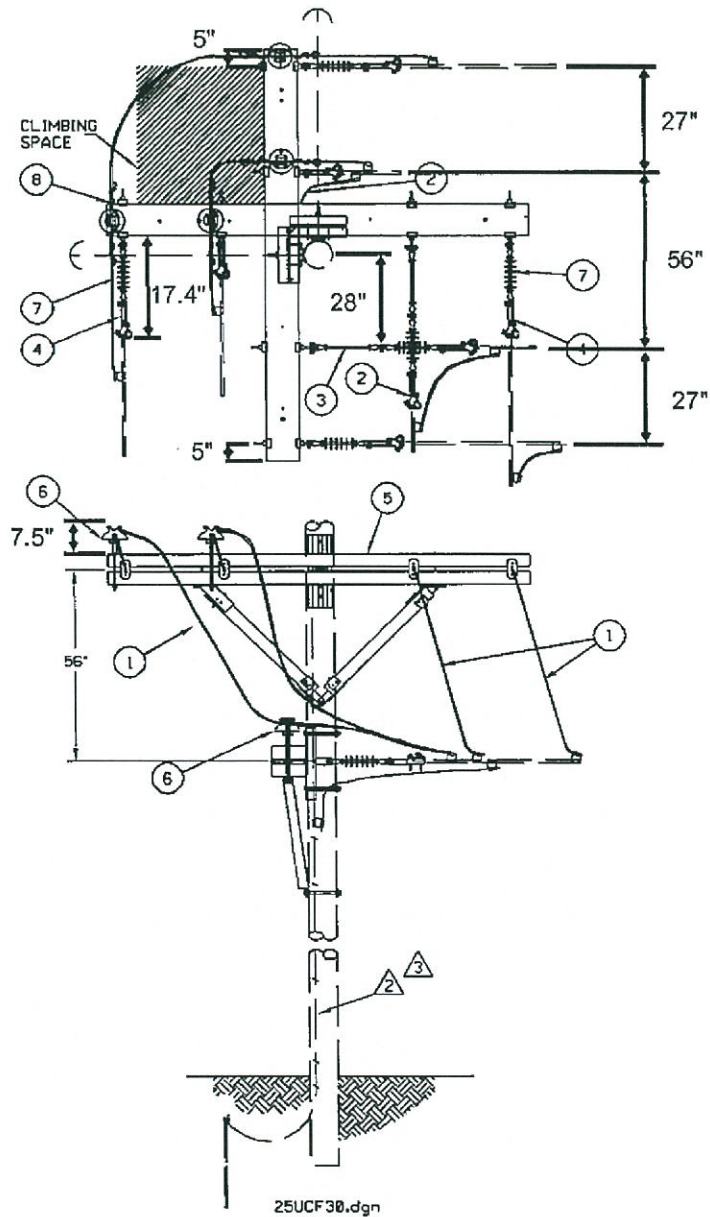


DESIGN GUIDELINES					
Conductor Size	1/0	266	T2-1/0	477 18/1	T2-4/0
Maximum Span	350	350	325	325	325
Maximum Angle	1°	1°	1°	1 1/2°	1 1/2°
GUY ALL STRUCTURES GREATER THAN 1°					





DESIGN GUIDELINES					
Conductor Size	1/0	266	T2-1/0	477 18/1	T2-4/0
Maximum Span	350	350	325	325	325
Maximum Angle	15°	10°	10°	8°	8°

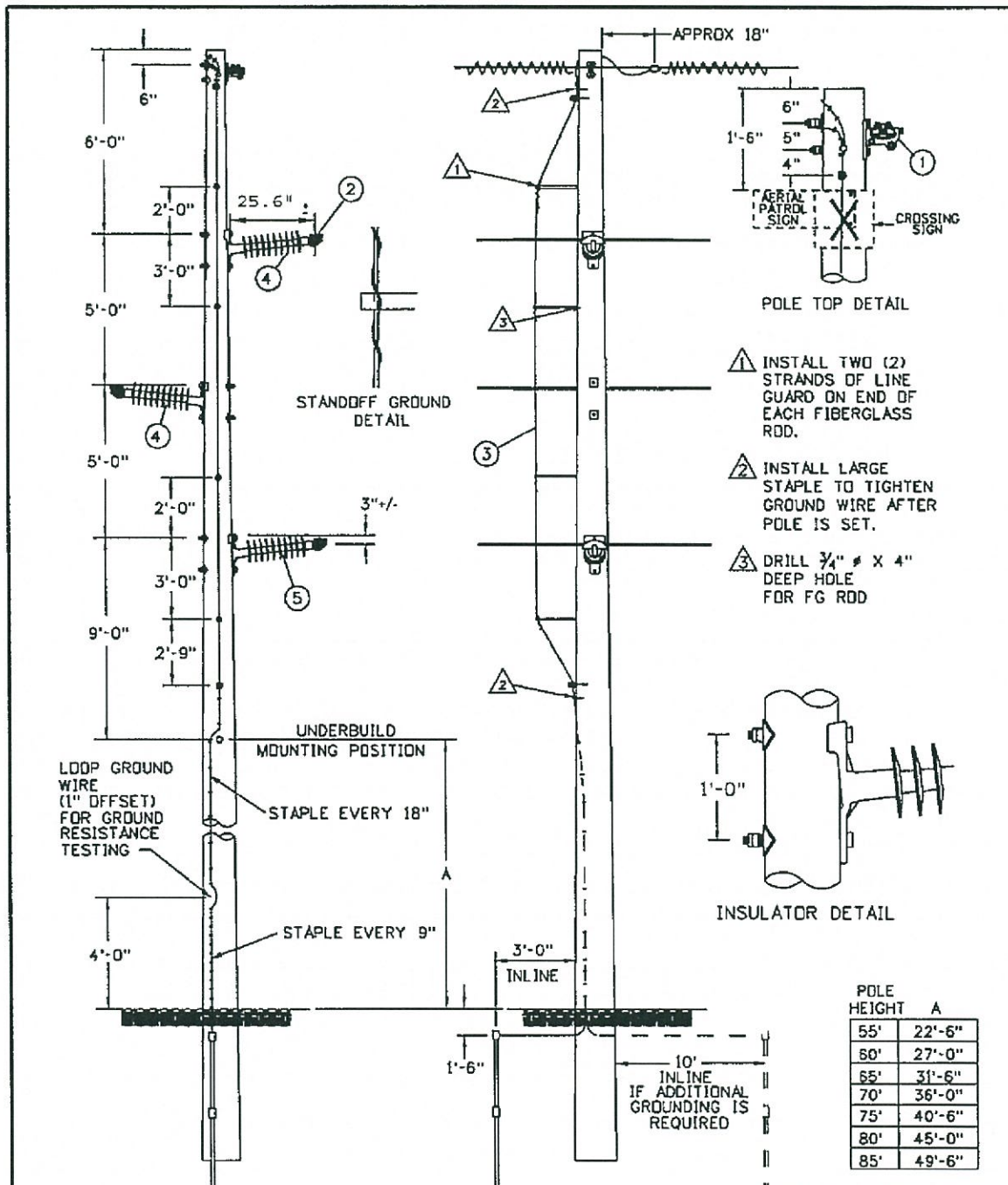


DESIGN GUIDELINES					
Conductor Size	1/0	266	T21/0	477 18/1	T24/0
Maximum Span	350	350	325	325	325
Maximum Angle	90°	90°	90°	90°	90°

Transmission  
Construction  
Standards

69kV Assemblies  
69kV Tangent  
w/ HPI & Standoff Ground

Std No: TCS-11  
Page 1  
Issued Oct. 2008



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ITC Midwest

NO.	DATE	REVISION	BY	CHK'D	APP'D
3	10-17-06	CHANGE TO ITC BORDER	RAH		
2	11-10-06	GROUNDING CHANGES	RT		
1	02-13-04	STANDARD CHANGES	SD		DO
0	09-01-99	ORIGINAL ISSUE	SJK		



69KV TANGENT W/ HPI & STANDOFF GND

Page 14

Scale: NONE

DWG. NO.

69TGSP

Segment 3 of 4

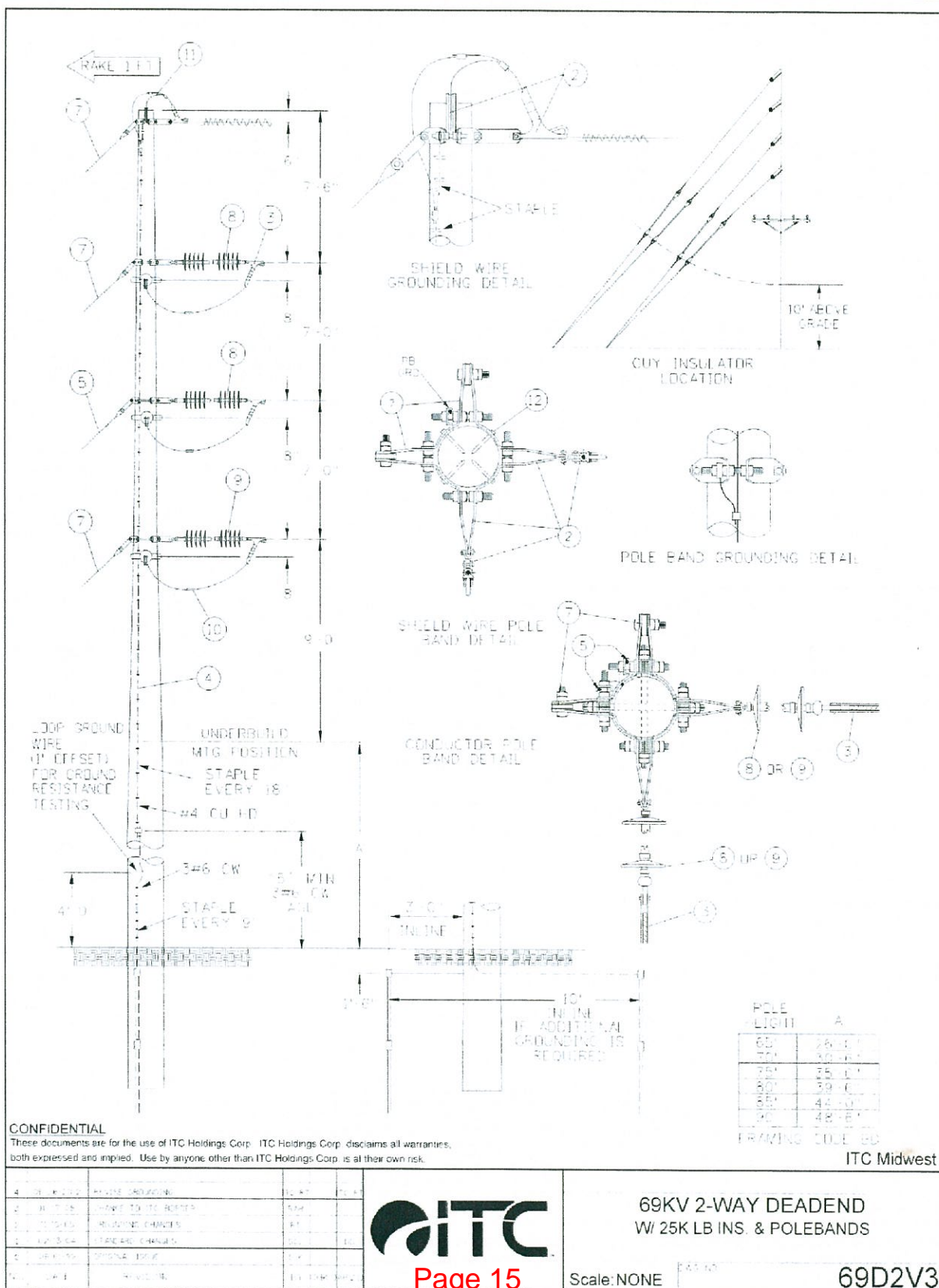




Transmission  
Construction  
Standards

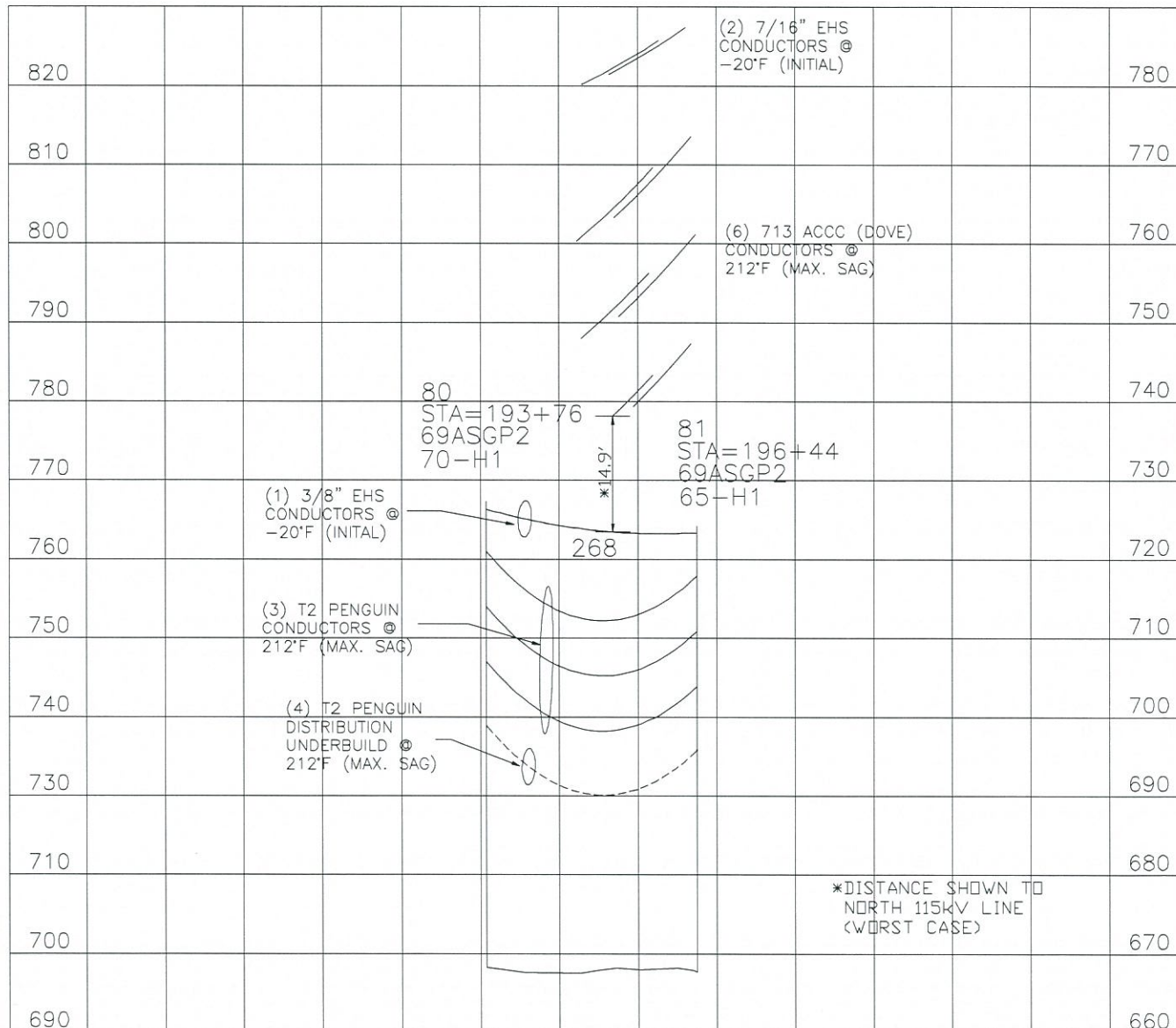
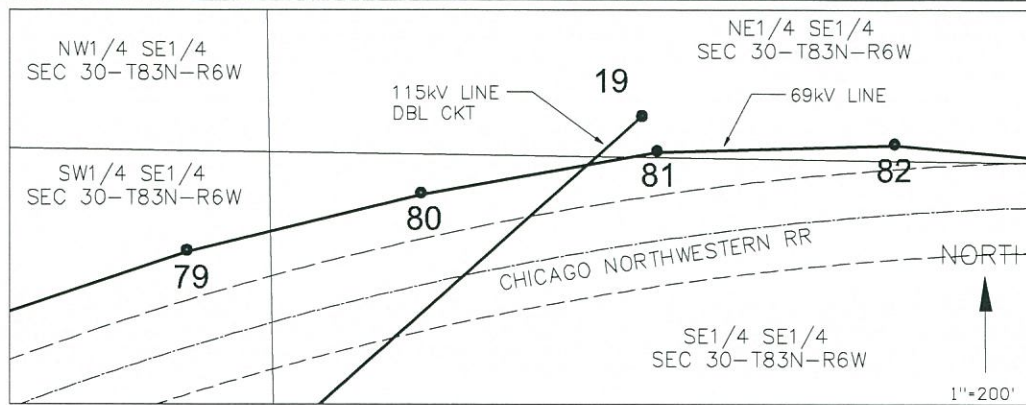
69kV Assemblies  
69kV 2-Way Deadend  
w/ 25lb.ins. & Polebands

Std No: TCS-11  
Page 41  
Issued Nov. 2012



Segment 3 of 4





PROFILE VIEW

1"=200' (H)  
1"=20' (V)

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Segment 3 of 4



Page 16

PRAIRIE CREEK TO MT. VERNON 69KV

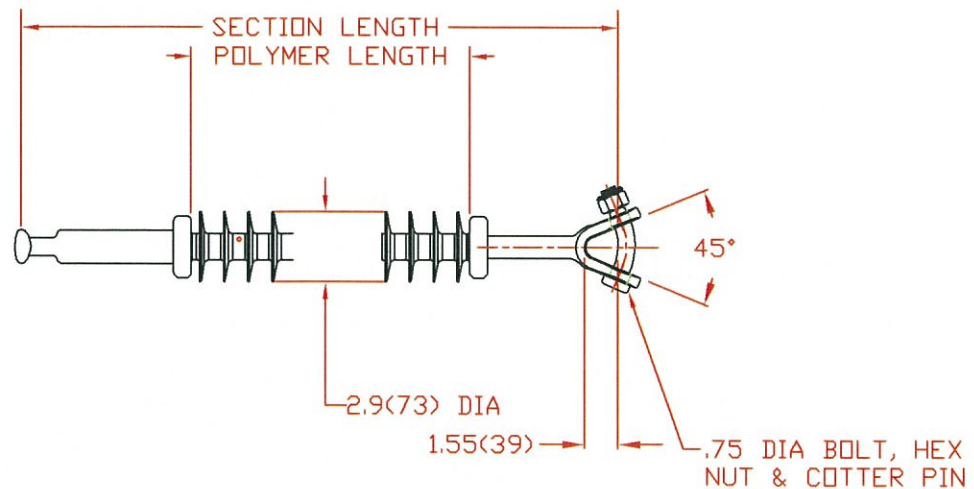
EXHIBIT B  
ITC 115kV CROSSING  
SECTION 30, T83N, R6W

NO.	DATE	REVISION	BY	CHK'D
0	09-22-2016	ORIGINAL ISSUE	MEH	

DWG. NO. 20346-95-01  
Scale: AS SHOWN







CATALOG NUMBER \_\_\_\_\_ S025053S2010  
 GROUND FITTING \_\_\_\_\_ Y-CLEVIS  
 LINE FITTING \_\_\_\_\_ ANSI\_52-5\_BALL  
 LINE END RING \_\_\_\_\_ N/A  
 GROUND END RING \_\_\_\_\_ N/A


MECHANICAL CHARACTERISTICS  
 SPECIFIED MECHANICAL LOAD \_\_\_\_\_ 25000 POUNDS (111 KN)  
 ROUTINE TEST LOAD RATING \_\_\_\_\_ 12500 POUNDS (55.5 KN)

MECHANICAL CHARACTERISTICS  
 WEIGHT \_\_\_\_\_ 9.4 LBS (4.2 KG)  
 # OF SHEDS \_\_\_\_\_ 50  
 WEATHERSHED SPACING \_\_\_\_\_ 1.08 IN (27 MM)  
 CORE DIAMETER \_\_\_\_\_ 0.93 IN (23 MM)  
 SECTION LENGTH \_\_\_\_\_ 65.7 IN (1668 MM)  
 POLYMER LENGTH \_\_\_\_\_ 53.9 IN (1369 MM)  
 DRY ARCING DISTANCE \_\_\_\_\_ 53.9 IN (1369 MM)  
 LEAKAGE DISTANCE \_\_\_\_\_ 137 IN (3479 MM)

ELECTRICAL CHARACTERISTICS IN  
 ACCORDANCE WITH ANSI C29.11-1988  
 60 Hz DRY FLASHOVER \_\_\_\_\_ 560 kV  
 60 Hz WET FLASHOVER \_\_\_\_\_ 525 kV  
 POSITIVE IMPULSE CRITICAL FLASHOVER \_\_\_\_\_ 900 kV  
 NEGATIVE IMPULSE CRITICAL FLASHOVER \_\_\_\_\_ 900 kV

ELECTRICAL CHARACTERISTICS IN  
 ACCORDANCE WITH IEC-383  
 60 Hz WET WITHSTAND (1 MINUTE) \_\_\_\_\_ 390 kV  
 IMPULSE POSITIVE WITHSTAND \_\_\_\_\_ 810 kV  
 IMPULSE NEGATIVE WITHSTAND \_\_\_\_\_ 810 kV

SILICONE RUBBER HOUSING 3MM MINIMUM WALL THICKNESS OVER CORE ROD

<div style="border: 2px solid blue; padding: 5px; display: inline-block;">109568</div>				<b>HUBBELL® POWER SYSTEMS</b>	
		TITLE <b>QUADRI*SIL INS SUSPENSION ASSEMBLY</b>			
<small>CONFIDENTIAL: THIS DRAWING AND ITS CONTENTS ARE CONFIDENTIAL AND THE EXCLUSIVE PROPERTY OF HUBBELL POWER SYSTEMS. NO PUBLICATION, DISTRIBUTION OR COPIES MAY BE MADE WITHOUT THE WRITTEN CONSENT OF HUBBELL POWER SYSTEMS. HUBBELL POWER SYSTEMS UNPUBLISHED ALL RIGHTS RESERVED UNDER THE COPYRIGHT LAWS.</small>		SIZE	DWG NO.	CAT / PART / ASSY NO.	REV
		S	PSXIT-SX	S025053S2010	1
DO NOT SCALE THIS DRAWING		DRN BY DFT7765		DATE 11/26/02	
				SHEET 1 OF 1	

Program Revision  
2008.11.4.07.57.10

REV DATE 03/08/07